

Duties and Responsibilities of the Radiation Safety Officer and Delegation of Authority for Well-Logging

A radiation safety officer (RSO) has the duty and responsibility to the licensee to oversee and ensure safe operation of the licensee's well-logging program. The items below are not a complete list of requirements. A licensee must comply with the conditions of the license and regulations specified in Title 17, California Code of Regulations (17 CCR), Title 10, Code of Federal Regulations (10 CFR), Part 20, and the U.S. Department of Transportation (DOT). The RSO has the duty and responsibility to:

- Stop any licensed material activities that the RSO considers unsafe. (17 CCR 30253)
- Secure licensed material from unauthorized access or removal. (10 CFR 20.1801 and 20.1802)
- Use radiation protection procedures and controls to ensure occupational doses and doses to the public are as low as reasonably achievable (ALARA) as defined in 10 CFR 20.1003.
- Develop, document and implement a radiation protection program (RPP) that is consistent with the scope of the activities included in the license and ensures compliance with the regulations and license conditions. Review RPP content and implementation annually. (10 CFR 20.1101)
- Demonstrate by measurement or calculation that any member of the public is not likely to receive radiation exposures exceeding the regulatory limit. (10 CFR 20.1301)
- Ensure individuals installing, relocating, maintaining, or repairing devices containing radioactive materials or sealed sources are trained and authorized by the State of California, the U.S. Nuclear Regulatory Commission (NRC) or Agreement State license.
- Ensure that the licensed materials are used only by those individuals who have satisfactorily completed the appropriate training programs or who are authorized by the license. (17 CCR 30348.1)
- Develop a program for training logging supervisors and logging assistants that includes initial training, on-the-job training, annual safety reviews, and operating and emergency procedures. (17 CCR 30345.3)
- Establish and maintain a personnel monitoring program. Provide personnel monitoring equipment, such as film badges or thermoluminescent dosimeters (TLD), to individuals who are likely to receive more than 10% of the allowable radiation dose in one year. (10 CFR 20.1501 and 20.1502) Film badges shall be replaced at least monthly and other personnel dosimeters replaced at least quarterly. (17 CCR 30348.3)
- Ensure a logging supervisor, logging assistant or anyone who acts in either capacity shall wear at all times during the handling of radiation sources, a personnel dosimeter. Each dosimeter shall be assigned to and worn by only one individual. (17 CCR 30348.3)
- Develop, distribute, implement and maintain up-to-date written operating and emergency procedures. (17 CCR 30348.2)

- Instruct individuals, working with or frequenting areas with radioactive materials, on the potential health risks, effective use of protective devices, procedures required to minimize exposure to radioactive materials, and their responsibility to promptly report any conditions that may cause unnecessary exposures. (17 CCR 30255)
- Comply with 17 CCR 30350.3 and immediately notify California Department of Public Health (CDPH) of any incidents involving rupture of sealed sources or exposure to radioactive materials, violations of regulations or license conditions. Follow-up with a written report that includes the corrective actions taken, preventive actions planned and the results of any evaluation or assessment.
- Lock licensed material, being stored or transported, to prevent tampering or removal by unauthorized personnel and to minimize danger. (17 CCR 30346.1)
- Ensure a logging supervisor is physically present at a jobsite whenever radioactive materials are being handled and are not secured. (17 CCR 30350)
- Dispose, return to manufacturer or transport licensed material in accordance with all applicable DOT requirements. Obtain receipts acknowledging such activities. (17 CCR 30373)
- Maintain up-to-date licenses. Ensure amendment and renewal requests are submitted prior to the license expiration date. (17 CCR 30194)
- Post documents such as license information, operating procedures, and form RHB 2364 (Notice to Employees) in conspicuous places. (17 CCR 30255)
- Ensure all equipment used and activities performed are limited to those specified in the license, the regulations, the Sealed Source and Device Registry (SSDR) certificate(s), and the manufacturer's recommendations and instructions.
- Maintain a sufficient supply of properly calibrated and operable radiation survey instruments sensitive enough to detect low radiation and contamination levels. (10 CFR 39.33)
- Ensure sealed sources are tested for leakage with the frequency specified in the license. (17 CCR 30275 and 30346.3)
- Make a reasonable effort to recover a sealed source lodged downhole, unless the licensee believes recovery could result in its rupture. (17 CCR 30346)
- Conduct semi-annual physical inventory for all licensed material received and possessed under the license and maintain related records for three years. (17 CCR 30346.4 and 30346.5)
- Act as the licensee's primary liaison with the CDPH Radiologic Health Branch (RHB) on license or inspection matters.
- Ensure RSO, alternate RSO, and authorized users submit completed form RH 2050A (Statement of Training and Experience) and the certificate of training on well-logging device operation from the manufacturer.

- Submit to RHB a written 30-day notification, a completed CDPH 5314 form (Certificate of Disposition of Materials), copies of leak tests, and a final survey prior to vacating a facility. (17 CCR 30256)

Note: *In the event that the licensee proposes a change in its RSO or to terminate the license, you acknowledge and agree to remain the licensee's RSO until RHB amends the license reflecting this change or terminates the license.*

I hereby acknowledge and have read the above duties and responsibilities:

Signature of Radiation Safety Officer

Print Name

Date

Delegation of Authority

Memo To: Radiation Safety Officer
From: Chief Executive Officer
Subject: Delegation of Authority

You, _____, have been appointed Radiation Safety Officer (RSO) and are responsible for ensuring the safe use of radiation. You are responsible for managing the radiation protection program; identifying radiation protection problems; initiating, recommending, or providing corrective actions; verifying implementation of corrective actions; stopping unsafe activities; and ensuring compliance with regulations. You are hereby delegated the authority necessary to meet those responsibilities, including prohibiting the use of radioactive material by employees who do not meet the necessary requirements and shutting down operations when justified for radiation safety. You are required to notify management of situations where staff are not cooperating and not addressing radiation safety issues. In addition, you are free to raise issues with the California Department of Public Health, Radiologic Health Branch at anytime. You will directly manage the radiation safety program and be physically present at this facility (and any other use locations listed on the Radioactive Materials License) when necessary to ensure that the radiation protection activities are performed.

*Signature of Management Representative	Print Name	Title	Date
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I accept the above responsibilities:

Signature of Radiation Safety Officer	Print Name	Date
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cc: Affected department heads

*Examples of management representatives with signature authority are: Owner, Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, President or Vice President of the organization.